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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,430	02/15/2001	Ernst Ruberl	AT 000010	5073

— 7590 09/25/2002

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EXAMINER
LAM, THANH

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/784,430	Guntransdorf et al.
Examiner	**Art Unit**
Thanh Lam	2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jul 2, 2002* .

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-20* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Suyama.

Regarding claim 1, Suyama discloses an apparatus having an electroacoustic transducer, said transducer comprising: a magnet system which generates a useful magnetic field in a useful field area and a stray magnetic field in a stray field area, sound generating means (col. 2, lines 31-37) arranged in said useful magnetic field for generating acoustic sound wave, and vibration generating means for generating vibrations perceptible by a user (inherently perceptible by user) of the apparatus, wherein the vibration generating means comprises at least one movably mounted vibration generating coil (15 and 46) arranged in the stray magnetic field generated.

Regarding claim 6, Suyama discloses an electroacoustic transducer, comprising: a magnet system which generates a useful magnetic field in a useful field area and a stray magnetic field in a stray field area, sound generating means (col. 2, lines 31-37) arranged in said useful magnetic field for generating acoustic sound wave, and vibration generating means (15 and 46) for

generating vibrations perceptible by a user (inherently perceptible by user) of the apparatus, wherein the vibration generating means comprises at least one movably mounted vibration generating coil arranged in the stray magnetic field.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 2-5,7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suyama in view of Azima et al.

Regarding claim 10 as applied to claims 1 and 6 above, Suyama disclose all the aspect of the claimed invention except for said vibration means comprising one or more second coils placed in said magnetic field.

Azima et al. disclose said vibration means comprising one or more second coils (13) placed in said magnetic field.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transducer of Suyama by adding the vibration means comprising one or more second coils placed in said magnetic field as taught by Azima et al. to improve the vibration of the transducer.

Regarding claim 2, the proposal in combination of Suyama and Azima et al. disclose the vibration generating means include two movably mounted vibration generating coils arranged in the stray field area, and the two vibration generating coils are arranged in series opposition or in anti-parallel.

Regarding claim 3, the proposal in combination of Suyama and Azima et al. disclose the vibration generating means include, in addition to the at least one vibration generating coil, a metal part which is mechanically connected to the at least one vibration generating coil and which consists of a soft-magnetic material.

Regarding claim 4, the proposal in combination of Suyama and Azima et al. disclose the magnet, system is basically ring-shaped, and the magnet system generates the stray magnetic field, which emanates from its outer peripheral area, and the at least one vibration generating coil

is annular and is arranged to be coaxial with the axis of the magnet system and is mounted so as to be movable parallel to the axis of the magnet system.

Regarding claim 5, the proposal in combination of Suyama and Azima et al. disclose an a.c. generator adapted to generate an a.c. signal having a frequency of, preferably, between 50 Hz and 200 Hz, (low frequencies of fig. 8 of Suyama) and the a.c. generator is connected to the at least one vibration generating coil in an electrically conductive manner and supplies the a.c. signal generated by it to the at least one vibration generating coil.

Regarding claim 7, the proposal in combination of Suyama and Azima et al. disclose the vibration generating means include two movably mounted vibration generating coils arranged in the stray field area, and the two vibration generating coils (13,18) are arranged in series opposition or in anti-parallel.

Regarding claim 8, the proposal in combination of Suyama and Azima et al. disclose the vibration generating means include, in addition to the at least one vibration generating coil, a metal part which is mechanically connected to the at least one vibration generating coil and which consists of a soft-magnetic material.

Regarding claim 9, the proposal in combination of Suyama and Azima et al. disclose the magnet system is basically ring-shaped, and the magnet system generates the stray magnetic field, which emanates from its outer peripheral area, and the at least one vibration generating coil is annular and is arranged to be coaxial with the axis of the magnet system and is mounted so as to be movable parallel to the axis of the magnet system.

Regarding claim 11, the proposal in combination of Suyama and Azima et al. disclose said magnetic field comprises a useful magnetic field and a stray magnetic field, and wherein said first coil is located in said useful magnetic field, while said one or more second coils are located in said stray magnetic field.

Regarding claim 12, the proposal in combination of Suyama and Azima et al. disclose said vibration means further comprises a metal part mechanically connected to said one or more second coils.

Regarding claim 13, the proposal in combination of Suyama and Azima et al. disclose said metal part consists of a soft-magnetic material.

Regarding claim 14, the proposal in combination of Suyama and Azima et al. disclose said magnet system comprises a ma-net of rinc,-shaped having an inner peripheral area and an outer peripheral area.

Regarding claim 15, the proposal in combination of Suyama and Azima et al. disclose said useful magnetic field is located at said inner peripheral area while said stray magnetic field is located at said outer peripheral area.

Regarding claim 16, the proposal in combination of Suyama and Azima et al. disclose said one or more second coils are arranged at said outer peripheral area and coaxially with said magnet.

Regarding claim 17, the proposal in combination of Suyama and Azima et al. disclose said one or more second coils are mounted to be movable parallel to an axis of said magnet.

Regarding claim 18, the proposal in combination of Suyama and Azima et al. disclose said sound generating means further comprises a diaphragm activated by said first coil to produce said acoustic sound wave.

Regarding claim 19, the proposal in combination of Suyama and Azima et al. disclose said sound generating means comprises a coil and a diaphragm activated by said coil for generating said acoustic sound wave.

Regarding claim 20, the proposal in combination of Suyama and Azima et al. disclose said sound generating means comprises a coil and a diaphragm activated by said coil for generating said acoustic sound wave.

Response to Arguments

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

Thanh Lam

Patent Examiner

Sept. 18, 2002

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